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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,190	02/27/2004	Ebrahim H. Hargan	303.878US1	6975

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EXAMINER	
LE, THONG QUOC	

ART UNIT	PAPER NUMBER
2827	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/789,190	HARGAN, EBRAHIM H.	
	Examiner	Art Unit	
	Thong Q. Le	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-17 and 51-56* is/are allowed.

6)☒ Claim(s) *28-38, 40-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/20/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Amendment filed on 11/20/2006 has been entered.

2. Claims 1-56 are presented for examination.

Information Disclosure Statement

3. This office acknowledges receipt of the following items from the Applicant:

Information Disclosure Statement (IDS) filed on 11/20/2006.

4. Information disclosed and list on PTO 1449 was considered.

Response to Arguments

5. Applicant's arguments with respect to claims 1-56 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 28-38, 40-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Keeth et al. (U.S. Patent No. 6,807,613).

Regarding claim 28, Keeth et al. disclose a method (Figures 4-5) comprising:

setting a latency time interval (Figure 4, T1-T2) for outputting memory data at a data line (Figure 4, DATA), wherein the latency time interval occurs between an issuance of a command signal (Figure 4, CMD) and the availability of a first bit of the memory data at the data line (column 7, lines 38-44);

outputting a conditioning data (Figure 4, WL) to the data line during the latency time interval (Column 1, lines 20-40, Column 6, lines 10-49); and

outputting the memory data (Figure 4, DATA) to the data line after the latency time (Figure 4, after WL, T2, Column 1, lines 49-64, Column 2, lines 33).

Regarding claims 29-30, 43-44, Keeth et al. disclose wherein the conditioning data includes a single conditioning bit (Column 7, lines 39-44), and wherein the single conditioning bit has a bit value of zero (Column 7, lines 39-44, first bit).

Regarding claim 31, Keeth et al. disclose wherein the data line has an initial signal level representing a bit value before the conditioning data is transferred to the data line, wherein the single conditioning bit has a bit value, and wherein the bit value of the single conditioning bit is unequal to the bit value of the data line (Column 7, lines 11-44, Figures 4-5).

Regarding claims 32-33, 47, Keeth et al. disclose wherein the conditioning data includes multiple conditioning bits (Column 7, lines 39-44), and wherein any two consecutive bits among the number of conditioning bits have bit values different from each other (Column 7, lines 38-44), and wherein the number of conditioning bits is an odd number (Figures 4-5).

Regarding claim 35, Keeth et al. disclose wherein outputting the conditioning data and outputting the memory data to the data line include performing a multiplexing function (Figure 1, 606) to select data between the conditioning data from a conditioning data storage unit and the memory data from a memory array (Column 4, lines 23-51).

Regarding claims 37, 41, Keeth et al. disclose a method (Figure 6) comprising:

issuing a command signal (Figure 6, CMD) to access memory data from a memory array (Firgure1, 611);

outputting a strobe signal (Figure 6, STROBE) to a strobe line after the command signal is issued, the strobe signal having a plurality of signal transitions, wherein each of the signal transitions occurs when the strobe signal switches between a first signal level and a second signal level;

transferring a conditioning bit from a conditioning data storage unit to a data line at a first signal transition of the strobe signal after the command signal is issued (Figure 6, Column 4, lines 23-40); and

transferring the memory data from the memory array to the data line after the transferring of the conditioning bit (Figure 6, DATA, column 4, lines 64-67, column 5, lines 1-8).

Regarding claims 38, 42, Keeth et al. disclose wherein transferring the memory data occurs when the strobe signal has a second signal transition after the command signal is issued (Column 4, lines 64-67).

Regarding claim 45, Keeth et al. disclose wherein the strobe signal has at least one signal transition (Figure 6, P, F, F) during the conditioning time interval (Figure 6, TS1), and wherein at least two of conditioning bits have bit values different from each other (Figure 6, P, F).

Regarding claim 49, Keeth et al. disclose wherein transferring the number of conditioning bits includes transferring one of the conditioning bits when the strobe signal has a first signal transition after the command signal is issued (Figure 6).

Regarding claim 50, wherein the command signal is read command signal for read data from the memory array (Column 5, line 38).

Allowable Subject Matter

8. Claim 39 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 39 includes allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Keeth et al. (U.S. Patent No. 6,807,613), and others, does not teach the claimed invention having wherein before the conditioning bit is transferred, the data line

has an initial signal level representing the bit value, and wherein the conditioning bit has a bit value unequal to the bit value of the data line.

9. Claims 1-27, 51-56 are allowed.

Claims 1-27, 51-56 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Keeth et al. (U.S. Patent No. 6,807,613), and others, does not teach the claimed invention having a device and a method comprising a conditioning data storage unit for storing conditioning data wherein the conditioning data is different from the memory data transferred to and from the memory array.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarabian Amir can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Q. Le
Primary Examiner
Art Unit 2827

1/16/2007